

Quadrennial Energy Review Second Installment Electricity: Generation to End-Use Stakeholder Meeting #6: Los Angeles, CA May 10, 2016



May 10, 2016
Tom Bradley Tower Room
Los Angeles City Hall
200 North Spring Street
Los Angeles, CA

Host and Panelist Bios



Dr. Elizabeth Sherwood-Randall, Deputy Secretary of Energy

Elizabeth Sherwood-Randall currently serves as Deputy Secretary at the U.S. Department of Energy. She has been serving in this role as second in command at the Energy Department since October 2014.

She joined the Obama Administration on day one, serving as Special Assistant to the President and Senior Director for European Affairs at the National Security Council from 2009 to 2013. She served from 2013 to 2014 as the White House Coordinator for Defense

Policy, Countering Weapons of Mass Destruction, and Arms Control.

Before joining President Obama's team, Dr. Sherwood-Randall worked at Stanford University, at Harvard University, and at the Council on Foreign Relations. In the Clinton Administration, she served as Deputy Assistant Secretary of Defense for Russia, Ukraine, and Eurasia from 1994 to 1996.

Dr. Sherwood-Randall attended college at Harvard and then went on to graduate school at Oxford University, where she was among the very early ranks of female Rhodes Scholars. After finishing her education, she began her career working for then-Senator Joe Biden as his chief advisor on foreign and defense policy.

Born and raised in California, she is married to Dr. Jeff Randall, a neurosurgeon, and they have two teenaged sons.



Barbara Romero, Deputy Mayor for City Services, Los Angeles, California

Barbara Romero is the Deputy Mayor of City Services in the office of Mayor Eric Garcetti. She was appointed to this position in March 2015 after serving as a Board of Public Works Commissioner.

Ms. Romero spent a decade working for the Mountains Recreation and Conservation Authority, where she was Chief of Urban Projects and the Watershed Planning Division. As

the liaison to local, state, and federal legislators on park planning issues, Ms. Romero handled legislative policies and project funding strategies, and managed millions of dollars for urban park projects. She also focused on

identifying, developing and implementing multiple park development, restoration, and acquisition projects primarily in urban areas along the Upper Los Angeles River and tributaries.

She currently serves as a Board Member for the Valley Presbyterian Hospital, and has previously served on the boards of the Baldwin Hills Conservancy and the L.A. River Revitalization Corporation. In addition, she was a member of the Los Angeles Planning Commission and previously worked for the L.A. Conservation Corps and Building Up Los Angeles, where she led an AmeriCorps program to develop school and community gardens and mural projects with high school and college students in East L.A.

Ms. Romero grew up in the East L.A. community of Boyle Heights. She holds a B.A. from UCLA.

Sam Rikkers, Administrator, Rural Business-Cooperative Service

Sam Rikkers is currently serving as Administrator for Rural Business-Cooperative Service. He was appointed Rural Business-Cooperative Service (RBS) Deputy Administrator in December 2014 and works across the breadth of the Agency's programs. He joined USDA after serving as Director of the Energy and Environment Team with the White House's Presidential Personnel Office.

Prior to this position, Sam served as Regional Field Director in Wisconsin on President Obama's re-election campaign. From 2007 to 2012, he was an attorney with a commercial litigation firm in New York City specializing in antitrust and First Amendment law. Before practicing law, Administrator Rikkers spent years working as a community and political organizer nationally and internationally. He earned a J.D. from the University of Wisconsin, a Master of International Affairs from Columbia University and a B.A. in Political Science and Philosophy from Macalester College in St. Paul, Minnesota. He also served as a volunteer with the US Peace Corps in rural Zambia. Administrator Rikkers is from a small town in Southern Wisconsin.

Christopher Kelley, PMP, Vice President, Energy Solutions Division, Energetics, Inc., and QER Public Meeting Moderator

Chris Kelley has nearly twenty years of experience in the energy and technologies industries. As an experienced program management consultant and FORTUNE 200 corporate director, his background includes developing and improving utility, technology and energy strategy and execution-oriented program management offices. He has facilitated effective collaborations of disparate groups focused on critical national challenges, industry-wide

opportunities, and organizational strategy. His experience includes a history of increasing effectiveness of project management throughout organizations – pushing efficiency and creating higher visibility into the project work that results in execution on strategy.

In addition to facilitating public meetings related to the Department of Energy's (DOE's) Quadrennial Energy Review, including moderating discussions on energy transportation, transmission, and storage, including a focus on electricity, Mr. Kelley has provided program and project guidance for DOE's ~\$8 billion, 99-project Smart Grid Investment Grant (SGIG), strategic and technology consulting for DOE's geothermal technology program, and similar services for the National Institute of Standards and Technology (NIST) and the American Society of Mechanical Engineers. Mr. Kelley has also engaged in program and project management activities for large utility, government, and non-governmental organizations' energy, organizational development, and technology projects, and has provided strategy development and implementation for FORTUNE 200 corporate services organizations.

Mr. Kelley has been with Energetics since 2009, when he joined the company from Constellation Energy, where he was Director of that company's IT and Supply Chain Project Management Office. He had been with Constellation Energy, and its regulated utility subsidiary Baltimore Gas & Electric (BG&E), since 2000. Prior to joining BG&E, Mr. Kelley worked on Y2K compliance issues for utilities for the Maxim Group.

Mr. Kelley earned his Bachelor's degree, *Magna cum laude*, in Information Systems, from the University of Maryland Baltimore County, and his MBA, in Global Strategy and Management, from the University of Maryland, Robert H. Smith School of Business. During his MBA studies, Mr. Kelley did graduate-level coursework and onsite consulting in developing nations, including business strategy for multinational and regional companies in Delhi, Bangalore, and Mumbai, India. He received his certificate as a Project Management Professional (PMP) from the Project Management Institute (PMI) in 2005. Since 2013, Mr. Kelley have been a member of the Maryland Clean Energy Center Advisory Council. Mr. Kelley became an Eagle Scout in 1990.

<u>Panel 1: Bulk Power Generation and Transmission: How Can We Plan, Build, and Operate the Appropriate Amount for Future Needs?</u>



Dr. Keith Casey, Vice President of Market and Infrastructure Development, California Independent System Operator (CAISO)

Keith Casey, Ph.D. is Vice President, Market and Infrastructure Development at the California Independent System Operator Corporation (CAISO). The division is responsible for developing efficient markets and effective infrastructure planning.

Part of the organization's start-up team in 1997, Dr. Casey served as Director, ISO Department of Market Monitoring from 2005 to 2009 and played a key role in designing a new market and monitoring program that guards against manipulation and fosters healthy

competition. He also helped develop a new method for assessing the economic benefits of proposed transmission expansion projects and served as an expert witness in state and federal regulatory proceedings on market analysis and the economic justification for key transmission expansion projects.

Since 2009, Dr. Casey has served as Vice President, Market & Infrastructure Development. He is responsible for developing market design and infrastructure policies and overseeing the transmission planning and generation interconnection process to ensure all of these critical functions evolve to effectively address the changing needs of the industry and facilitate California's transition to a greener and smarter electric grid.

Dr. Casey received his bachelor's degree in economics from the University of California San Diego. He has a Master's degree in Economics from the University of Maine and earned his doctorate in Agricultural and Resource Economics with a specialization in Environmental Economics from the University of California Davis.



Jan Smutny-Jones, Chief Executive Officer, Independent Energy Producers Association

Mr. Smutny-Jones has represented the Independent Energy Producers Association (IEP) since 1987. The IEP is California's oldest and leading trade association representing both the interests of developers and operators of independent energy facilities and independent power marketers. Independent energy producers include producers of renewable products derived from biomass, geothermal, small hydro, solar, and wind; producers of highly efficient cogeneration; and owners/operators of gas-fired merchant facilities. IEP has been active in representing the interests of the industry before California's regulatory commissions and the legislature since 1982. IEP's primary goals are to safeguard the interests of operating

independent energy projects, and ensure that California remains a healthy market for development in the independent energy industry. Mr. Smutny-Jones has been a pivotal player in the California restructuring efforts, market reform and global climate change policy. He has served as Chair of the Governing Board of the California Independent System Operator, and as a member of the Governing Board of the California Power Exchange. Currently, he is serving as a member of the California Air Resources Board's Economic and Technology Advancement Advisory Committee for Climate Change.

Mr. Smutny-Jones is a graduate of Loyola Law School and is a member of the American, California State and Sacramento County Bar Associations. He did his undergraduate work at California State University, Long Beach, and has a certificate in Environmental Management from the University of Southern California. He is on the Board of Directors of the Renewable Certification Program "Green-E". He also serves on the Yolo Basin Foundation.

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Marcie Edwards, General Manager, Los Angeles Department of Water and Power (LADWP)

Marcie L. Edwards is the General Manager of the Los Angeles Department of Water and Power

(LADWP) and is the first woman to lead the nation's largest municipal utility.

Coming home to the utility where she previously worked for 24 years, Ms. Edwards brings decades of experience in the utility industry to the LADWP top job. She previously ran Anaheim Public Utilities for 13 years then was tapped to serve as Anaheim City Manager in

July 2013. A past Governor on the California Independent System Operator Board, Ms. Edwards also served as interim CEO of that agency in 2004, and, in that role, assisted in avoiding statewide power outages during the Energy Crisis.

Ms. Edwards began working for the LADWP in 1976 as a 19-year-old clerk typist. She gained experience in a variety of Power System positions, starting in steam plant operations and then gaining valuable experience in Power System Operations. She was elevated to energy control center manager and worked her way up to assistant general manager for marketing and customer service business units.

As the LADWP General Manager, she oversees the nation's largest municipal utility with an operating budget of \$5.5 billion, 8,800 employees, and responsibility for providing water and power to nearly 4 million Angelenos.



Rodney Cobos, Assistant Business Manager, Southern California Pipe Trades

Rodney Cobos is the Assistant Business Manager for the Southern California Pipe Trades, District Council 16, a labor union organization representing 15,000 Plumbers, Steamfitters, Welders, and H.V.A.C. Mechanics, Landscape Irrigation, and Fire Sprinkler Fitters and Apprentices.

After serving four years in the United States Army, Mr. Cobos joined the United Association of Plumbers and Steamfitters Local Union 484 located in Ventura, California in 1994. He

made a decision to become actively involved in the organization. He completed his five year apprenticeship and holds certifications in both plumbing and pipefitting. He is a certified tester in water backflow assemblies, earning a certificate of completion from University of Southern California Foundation for Cross Connection Controls.

In 2000, Mr. Cobos was elected by the membership to serve on the local union's finance committee and in 2002 elected president. He was appointed business representative in 2003 and in 2007 was elected business manager/financial secretary treasurer and held this position until going to working for District Council 16 in October of 2015.

He has also served as president of California State Pipe Trades and Southern California Pipe Trades District Council 16. He was the chairmen of the Ventura County Plumbers and Steamfitters Joint Apprenticeship Committee. He was actively involved in the Tri-Counties Building and Construction Trades Council, serving as their Vice-President. He has participated in community and labor alliance roundtables and currently chairs the local high school bond oversight committee.

Mr. Cobos, his wife Heidi, and their three boys Zac, Ramon, and Jorge live in Santa Paula, California.



Mike Florio, Commissioner, California Public Utilities Commission

Mike Florio was appointed to the California Public Utilities Commission on January 25, 2011, by Governor Jerry Brown. Prior to this appointment, Commissioner Florio was a senior attorney at The Utility Reform Network, and served in that capacity since 1978. Commissioner Florio is a member of California Conference of Public Utility Counsel. He was also a member of the board of governors of the California Independent System Operator from 1997 to 2005.

Commissioner Florio holds a J.D. from New York University School of Law, a M.P.A. from the Woodrow Wilson School at Princeton University, and a B.A. from Bowling Green State University.





Susan Kennedy, Founder and Chief Executive Officer, Advanced Microgrid Solutions

Ms. Kennedy served for two decades at the highest levels of state and federal government, most recently as chief of staff to Governor Arnold Schwarzenegger, cabinet secretary and deputy chief of staff to Governor Gray Davis and communications director for U.S. Senator Dianne Feinstein. She served from 2003-2006 on California's Public Utilities Commission, regulating the state's investor-owned electric utilities, telecommunications providers and private water companies.

Ms. Kennedy was at the center of many of California's groundbreaking environmental policies, including the carbon reduction mandate and cap-and-trade program under AB 32, the Low-Carbon Fuel Standard, auto emission standards and Renewable Portfolio Standard. She coordinated the State's emergency demand response efforts during the energy crisis of 2000-2001 and as a member of the PUC she authored what was then the largest energy efficiency program in utility history.

She holds a B.A. in Management from Saint Mary's College of California.



Michelle Bertolino, Electric Utility Director, City of Roseville, and President, California Municipal Utilities Association (CMUA)

Michelle Bertolino is the City of Roseville's Electric Utility Director. Roseville is located in Northern California, about 16 miles northeast of Sacramento, with a population of approximately 130,000. Roseville owns and operates two natural gas power plants and receives transmission services, as well as hydroelectric power, from the Western Area Power Administration and is a member of the Balancing Authority of Northern California.

Ms. Bertolino is the President of the California Municipal Utilities Association, the only statewide agency to represent publicly owned water and electric utilities and agencies. She is past Chair and current Commissioner of the Balancing Authority of Northern California; a member of the Board of Trustees for Northwest Public Power Association and Commissioner for the Transmission Agency of Northern California.

Ms. Bertolino has worked for Roseville for over fourteen years and as Director for the past seven years. During her tenure, the utility has been consistently recognized for its highly reliable system, efficient operations, innovative programs, and strong financial position. Roseville is regularly recognized for its solar programs, most recently as a top ten utility nationally, by the Solar Energy Power Alliance (SEPA).

Prior to Roseville, Ms. Bertolino worked for the Sacramento Municipal Utility District, San Francisco Public Utilities Commission and KPMG Peat Marwick.

Ms. Bertolino received her undergraduate degree in Economics from the University of California, Santa Barbara and attended the University of California, Davis' Graduate School of Management. A native Californian, she is married and has two adult children.



Lars Lee-Potreck, Vice President, Product Management and Product Marketing, Energy Management, Smart Grid Solutions & Services, Siemens AG

Lars Lee-Potreck is responsible for driving the product strategy in the Siemens Smart Grid Application business. He manages a broad suite of product solutions including consumer engagement, analytics, demand response, distributed energy management, OT/IT solutions, device adapters, CIS integration adapters, and development platform to be utilized by internal and external solution providers.

Mr. Lee-Potreck owns the product roadmap for the company that ensures innovative design, thought leading solutions with viable/strong market potential, and high value products/services that can be successfully marketed and deployed to primarily utilities globally through traditional direct and SI channels.

Prior to joining Siemens, as a European and Middle Eastern Sales Director for eMeter, a Siemens Smart Grid business, Mr. Lee-Potreck worked in various roles for telecommunications firms such as Seven Networks, Openwave, Software.com, and SGI.

Mr. Lee-Potreck earned his Master's degree in Aeronautic Science, from the *Fachhochschule München* (the Munich University of Applied Sciences).



Ronald O. Nichols, Senior Vice President for Regulatory Affairs and Nuclear, Southern California Edison

Ronald O. ("R.O.") Nichols is senior vice president of Regulatory Affairs and Nuclear for Southern California Edison (SCE). He is responsible for regulatory policy and affairs, regulatory operations and environmental affairs.

Mr. Nichols has 38 years of experience in the electric and water utility industry, with particular depth in California and adjoining states. He has been a strategic and operational

advisor to public power and investor-owned utilities, state and local government, and the financial community on complex energy and water supply and utility matters throughout the United States.

Prior to joining SCE in 2014, Mr. Nichols served as General Manager of the Los Angeles Department of Water and Power (LADWP) since January 2011, where he provided leadership for the utility in supplying reliable and competitively priced water and electricity while continuing to maintain and implement environmentally conscious policies and priorities.

Previously, Mr. Nichols was a managing director at the energy practice of Navigant Consulting, an international consulting organization with over 2,000 employees. From 1980 to 1997, before his position at Navigant, he was a co-founder and Senior Vice President of the energy and water utility consulting firm, Resource Management International, which was headquartered in Sacramento. Prior to starting his energy and water utility consulting career in 1980, he held positions with the California Department of Water Resources and the California Energy Commission.

Mr. Nichols is a graduate of the University of California, Davis, with a degree in Agricultural Economics and Business Management.



Michael Yaki, Senior Counsel for Market Expansion and Policy, Renovate America

Michael Yaki is the Senior Counsel for Market Expansion and Policy for Renovate America, a tech and finance company specializing in Property Assessed Clean Energy (PACE) financing of renewable energy and energy and water efficiency and conservation improvements.

Since 2001, Mr. Yaki has consulted in the private sector as an attorney and advisor on public policy and governmental strategies, both as a law partner and the head of

his firm, Michael Yaki Consulting. Prior to that time, Mr. Yaki served in a variety of public service roles, including serving as a member of the San Francisco Board of Supervisors and as the chief of staff to Democratic Leader Nancy Pelosi. He is currently serving his second six-year term as a Commissioner of the U.S. Commission on Civil Rights and a member of the Board of Advisors to the U.S. Election Assistance Commission.

Mr. Yaki earned his law degree from Yale University and his undergraduate degree from the University of California at Berkeley.

He lives in San Francisco, California.



David L. Geier, Vice President, Electric Transmission & System Engineering, San Diego Gas & Electric

David Geier is responsible for all aspects of electric transmission and substation operations, enterprise engineering and major capital projects.

Mr. Geier holds a Bachelor's degree in Electrical and Power Engineering from the University of Illinois, Urbana, and a Master's degree in Electrical and Computer Engineering from San Diego State University. He is a registered professional engineer in

California.

Mr. Geier currently serves as Vice Chairman of the Board of Directors for the American Red Cross of San Diego/ Imperial Counties. Mr. Geier also serves on the Dean's advisory board at San Diego State University and the University of San Diego, and is a member of Institute of Electrical & Electronic Engineers.

Panel 3: Generating and Delivering Electricity to Meet GHG Targets



Arlen Orchard, Chief Executive Officer and General Manager, Sacramento Municipal Utility District (SMUD)

Arlen Orchard, who previously served as SMUD's General Counsel, was named Chief Executive Officer and General Manager in April, 2014. He reports to the SMUD Board of Directors. As CEO, he leads the sixth largest community-owned electric utility in the nation serving a population of 1.5 million residents and managing a \$1.6 billion budget.

Mr. Orchard serves on the boards of directors of the American Public Power Association and the Northwest Public Power Association; and on the boards of directors and executive committees of the California Municipal Utilities Association and the Large Public Power Council. He also serves on the boards of directors of the Business Council for Sustainable Energy, Capital StageTheater Company, the Greater Sacramento Area Economic Council, and Valley Vision. Mr. Orchard frequently speaks on issues impacting the electric utility industry.

Mr. Orchard received a juris doctorate degree from the University of California, Davis School of Law, a Bachelor's degree in Political Science from the University of Nevada, Reno, and attended UCD's Graduate School of Management.



Melissa Lavinson, Vice President, Federal Affairs and Policy and Chief Sustainability Officer, Pacific Gas and Electric (PG&E)

Melissa Lavinson currently serves as the Vice President, Federal Affairs and Policy and Chief Sustainability Officer for PG&E Corporation. As the CSO, Melissa manages and directs a team responsible for PG&E's sustainability efforts and engagement, along with advising corporate leadership on how best to integrate and align PG&E's sustainability strategy with its business strategy. She is also responsible for directing the company's public policies on all federal issues that impact PG&E's operations and customers.

As the Vice President of Federal Affairs and Policy, Ms. Lavinson leads a team that engages Congress and the administration on a host of energy, tax and environmental policy issues. In her dual role, she also is responsible for building relationships at the national level with NGOs, trade associations, advocacy organizations, and other key stakeholders

Ms. Lavinson joined PG&E in 1997 in government relations and has held an increasing level of responsibilities in the company's federal affairs office. Her career has included assignments in California and the nation's capital, both within the utility and the holding company. She has distinguished herself in the industry for her expertise in energy and environmental policy and regulatory oversight.

Prior to joining PG&E, Ms. Lavinson was a Senior Associate at MRW and Associates, a consulting firm providing financial, economic, environmental, and market analysis to competitive energy suppliers, independent power producers, large energy consumers, financial institutions and utilities. Ms. Lavinson began her career with ICF Consulting, where she worked in the company's climate change practice for clients such as the Environmental Protection Agency, Department of Justice, World Bank, and Intergovernmental Panel on Climate Change.

Ms. Lavinson is on the boards of the Climate Action Reserve, the Women's Energy Resource Council, the China-U.S. Energy Efficiency Alliance, and She Should Run, which promotes women's representation in public office.

Ms. Lavinson received her bachelor's degree in economics from Hamilton College.



Jana Ganion, Energy Director, Blue Lake Rancheria

As the Energy Director for the Blue Lake Rancheria, Jana Ganion has worked to establish and refine the tribal government¹s energy strategy, and has implemented a wide array of clean energy initiatives to reduce greenhouse gas (GHG) emissions, reduce and levelize retail costs of energy, increase energy security and climate resilience, and fight the causes climate change through outreach and education programs.

Ms. Ganion has worked to develop successful partnerships, resulting in completed projects in energy efficiency, renewable energy, green fuels, and community resilience, including biomass power, biodiesel manufacturing, electric vehicle (EV) infrastructure and fleet migration. Her current (2016-2017) clean energy project is a low-carbon, community-scale microgrid which includes a 0.5MW solar array, 1MWh of battery storage, and a microgrid management control system to provide power for the Tribe¹s critical facilities. The microgrid will reduce the use of fossil energy in business-as-usual mode, and provide emergency power in islanded mode for as long as needed. Ms. Ganion currently serves on the U.S. Department of Energy, Office of Indian Energy, Indian Country Energy and Infrastructure Working Group (ICEIWG), where she works with other tribal governments on energy policy.

In 2014, the Tribe received the Pacific Gas & Electric Company (PG&E) Integration Award, in recognition of active participation in PG&E¹s programs, bundling energy efficiency, demand response, and distributed generation into an energy management solution that serves tribal operations and the larger community. And due to the Tribe¹s successful implementation of GHG reduction and community resilience projects, Blue Lake Rancheria was selected by the White House as a 2015-2016 "Climate Action Champion," one of 16 communities in the United States to receive this honor.

Ms. Ganion earned her Bachelor of Arts from Western Washington University.



Sonia Aggarwal, Director of Strategy, Energy Innovation

Sonia Aggarwal is the Director of Strategy at Energy Innovation, where she leads America's Power Plan, focusing on policies that can transform the electric grid into a clean, reliable, and affordable system. She also leads the company's work in analyzing the top energy policies to reduce emissions—both quantitatively and qualitatively.

Before joining Energy Innovation, Sonia was the Global Research Manager at ClimateWorks Foundation, and served as an advisor to the International Energy Agency's "Accelerating Technology Transitions" project. She has also worked in accident prevention design

engineering for a nuclear power plant in Ohio and advised clean energy companies on technology and financial communications.

Ms. Aggarwal holds a B.S. from Haverford College in Astronomy and Physics, and an M.S. from Stanford University in Engineering, with a focus on Energy.